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# Childhood Obesity Education: Sugar in Common Snacks

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# Sugar and Childhood/Adolescent Obesity

- In 2011-2014, Prevalence of obesity = 17% = 12.7 million children and adolescents 2-19 years old (1)
- Causes are multifactorial: **Sugary Beverages**, **Snack Foods**, Portion Size, Activity level, Environmental Factors, Socio-cultural factors, Family factors, Psychological factors (2)
- Immediately Health Effects: high cholesterol or high blood pressure (3), prediabetes (4), bone and joint problems, sleep apnea, stigmatization and poor self esteem (5)
- Long-term Health Effects: obesity as an adult (5), heart disease, type 2 diabetes, stroke osteoarthritis (6), cancer (cancer of the breast, colon, endometrium, esophagus, kidney, pancreas, gall bladder, thyroid, ovary, cervix and prostate)

# Economic Burden of Childhood/Adolescent Obesity

- Estimated National Medical Costs of Obesity-Related Illnesses in Adults = \$209.7 BILLION (7)
- National health expenditure on Obesity-Related Illnesses = 20.6%
- Obesity on Annual Medical Costs per person = \$2741

# Community Perspective

- “There is mounting evidence that high intake of refined sugars is having a significant and adverse impact on the health of Americans. Eating habits are established at a young age and therefore reducing the intake of added sugars in children may be a crucial step in supporting the health of our population. Our preference for sweet foods is innate and is further reinforced by the consumption of readily available and highly sweetened, processed foods. Oftentimes I see parents selecting foods, especially snack foods, that they believe to be healthy choices for their children which are high in added sugars. Helping these parents become more aware of the hidden sources of sugar while providing healthy alternatives is an important step for many children.”
  - Bridget Shea, MS, RD, CD – Clinical Dietician for the Community Health Improvement Team at Milton Family Practice
- “Thought intuitive to some, the concept of a low carbohydrate diet is lost among many people. It may stem from many things, including culture, lifestyle, and education. Some simply do not know what they are eating. Making people more aware of what they are consuming and how it can negatively affect their health is our responsibility as health care workers.”
  - David Reisman, MD – Family Medicine Physician for Milton Family Practice

# Intervention and Methodology

- Review of sources available at the Milton Family Practice Clinic for snack information
- Creation of a pamphlet targeted towards adolescents and parents of children informing them of the hidden amount of sugar in every day snacks
- The pamphlet includes
  - Information about the health risks associated with childhood and adolescent obesity
  - Facts of sugar contents in every day snacks
  - Top 6 sugary snacks that some people may perceive to be “healthy”, but are actually full of sugar

# Response

- The Community Health Team's response to the informational pamphlet was positive. I worked closely with Bridgette Shea, the Community Health Team's Dietician, to develop a pamphlet that she believed would be easily digested by both parents and adolescents. She personally expressed satisfaction and enthusiasm for this pamphlet as this filled a direct need for her practice with individuals referred to the team for dietician intervention.

# Effectiveness and Limitations

- Effectiveness: The purpose of this project was to create an informational pamphlet that outlined 6 common snacks that contribute to a person's high sugar diet. The pamphlet's effectiveness will be difficult to quantify, however one way to assess the pamphlet's effectiveness would be to ask patients sent to the dietician if they knew how much added sugar are in these 6 snacks.
- Limitations: The largest limitation to this pamphlet is balancing the amount of information on it with how much information a patient could retain and remember. With that said, 6 was arbitrarily chosen as it was a number of items that could easily be retained. The limit here is the low number of snacks foods evaluated.



# Future Interventions

- In terms of future interventions for this project, one could study the prevalence of overindulging on sugar in Milton's general area
  - Doing this would allow for a more targeted response to the community's direct need
- Future projects can also tackle other factors of obesity, namely activity level and portion sizes
  - Educational pamphlets, smart phrases, resource identification in Milton, identification of phone application resources
  - Further studies can specifically look at the prevalence of inactivity and overeating in children and adolescents in the Milton area

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